1: Métraux E-4 (no date) 1946 SM3 Caingang SM3

clay, then crush and sift them. The composition of the clay used by other groups is unknown. The potter first models the base of the pot by hand, then builds up the walls by adding successive coils, smoothing the sides with her fingers or with pieces of wood or shell, a corn cob, a stone, or a metal spoon. To keep the clay soft, she sprinkles it with water or saliva. The following day the pot is again smoothed, then left to dry in the shade and later in the sun. When thoroughly dry, the pot is covered with branches and fired in the open until red. Later, water mixed with ground maize is sprinkled on the pot "in order that it may be unbreakable." Cracks are filled with wax while the pot is still hot. The firing, however, is always imperfect; sherds of the heaviest *Caingang* pots reveal a thick layer of unfired clay in the middle. The presence of a foreigner during firing endangers the process, and may cause the pot to crack beyond repair.

The *Caingang* of Misiones make their pots characteristically black by exposing them to smoke in a basket before they are fired.

Caingang ware has a conical base so that it can be set into the sand (fig. 58, *e*, *f*). The *Caingang-Coroado* make large beer jars, strikingly like *Guaraní* jugs and funeral urns, with a conical body surmounted by a narrow edge. Besides large pots, the *Caingang* also manufacture flat roasting pans and conical drinking cups with thin walls.

Fire.—The *Caingang* fire drill consists of a stick of hard wood inserted into an arrow shaft and twirled between the palms of the hand. The hearth is a piece of soft wood. Dry palm shoots serve as tinder. According to a single authority, the *Caingang* also produce fire by sawing one piece of wood with another, a procedure observed by Rengger among the *Caingué*, but otherwise not reported for South America. The fire is activated with a fan. To avoid having to make fire, the natives carry a glowing brand in a pot or in a section of bamboo coated with clay.

Weapons: *Bows and arrows.*—Bows are made of páo d'arco (*Tabebuia impetiginosa*) or of black ipé (*Tabebuia chrysantha*). Before the *Caingang* acquired iron, they wrought the bow stave into shape by rubbing it with sandstone and flint flakes, and smoothed it with the rough leaves of umbauba (*Cecropia* sp.). Finally, the stave was warmed against a fire and smeared with grease. At each end a plaited bulge or, rarely, two right-angled notches prevented the caraguatá or embira string from slipping. The stave was wrapped with strips of cipo embé (*Philodendron imbe*) (fig. 59, *g*), which at both ends formed a bulge to prevent the string from slipping. Some *Caingang* bows were 9 feet long, but they generally averaged from 7 to 8 feet.

The arrow shaft, according to the locality, is made of taquara da frecha (*Gynerium sagittatum*), or of palo alecrim, a white wood that

: Métraux E-4 (no date) 1946 SM3 Caingang SM3

● 411

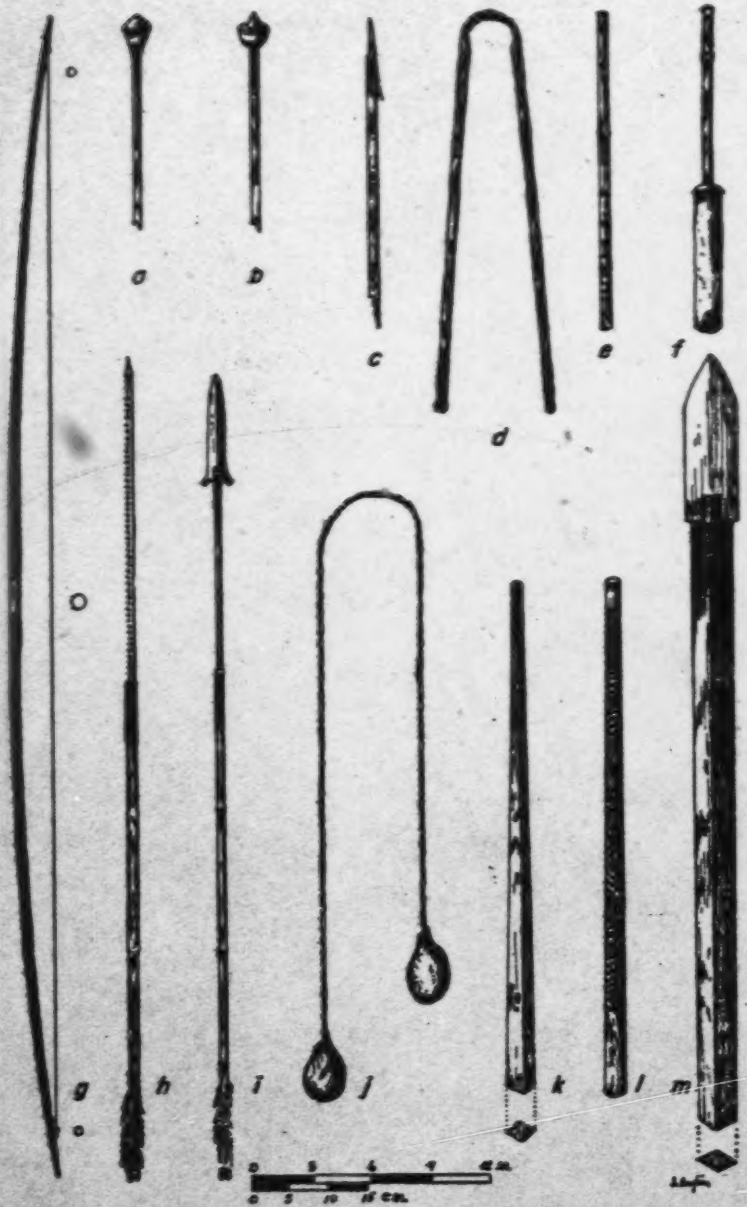

FIGURE 59.—*Caingang* weapons and artifacts. *a*, *b*, Bird arrows; *c*, arrow with single-barb bone point; *d*, fire tongs; *e*, flute; *f*, trumpet; *g*, bow; *h*, arrow with barbed wooden point; *i*, arrow with iron point; *j*, bolas; *k*, wooden club; *l*, wooden club covered with basketry; *m*, spear with iron point. (Redrawn from Koenigswald, 1936 *a*, figs. *a*–*k*; 1936 *b*, figs. 4–28.)

1: Métraux E-4 (no date) 1946 SM3 Caingang SM3

turns very light when dry. To straighten a reed, they lash it against a horizontal piece of wood, fastening a weight at one end. Arrowheads are wide taquara splinters, barbed rods (fig. 59, *h*), wooden rods tipped with a sharp point of monkey or deer bones (fig. 59, *c*), and massive, blunt wooden knobs used for birds (fig. 59, *a*, *b*). Some bird arrows are also tipped with four slightly diverging sticks or thorns. In recent years, the hunting and war arrows of the Santa Catarina *Aweikoma-Caingang* have been tipped with duck-bill iron heads (fig. 59, *i*). Feathering is of the arched type (eastern Brazilian). Hunters always carry a ready supply of bone heads, shafts, and feathers to replace lost arrows.

Spears are common among the *Caingang*, who tipped them with iron blades obtained from the Whites (fig. 59, *m*). The *Aweikoma* were extremely skillful in handling these weapons, which they decorated with fire-engraved designs and with basketry coverings.

The clubs of the Paraná *Caingang* are short cylindrical cudgels covered with basketry (fig. 59, *l*); those of the so-called *Botocudo* are more or less tapering, with the cross section often prismatic, thus presenting sharp cutting edges (fig. 59, *k*). They are decorated with fire engravings and with a basketry sheath. The cudgels of the São Paulo *Caingang* have a bulging head and are from 5 to 6 feet long.

Countless stone rings have been found on archeological sites of the State of Rio Grande do Sul. In the 17th century, some tribes of the upper Paraguay River used clubs with stone heads (itaiza), but there is no evidence that these Indians were *Caingang;* it is more likely that they were *Guaraní*.

To frustrate attack or pursuit by an enemy, the *Caingang* strewed the paths leading to their camps with caltrops made of sharp bone splinters bound in a bundle with cotton thread and wax. They also dug pitfalls in the bottom of which they placed sharp spears.

SOCIAL ORGANIZATION

Moieties.—The *Caingang* of Palmas have two exogamous, patrilineal moieties, each split into two groups. Baldus (1935, pp. 44–47) does not give the names of the moieties, merely stating that they were called by the word for both "friend" and "two," and that fellow members considered one another cousins. On the other hand, he lists the four subgroups according to their prestige as follows: Votóro, Kadnyerú (Kañerú), Aniky, and Kamé. The reason for this preferential ranking could not be ascertained. Every individual is born into a moiety, but is assigned to one of the subgroups at a mortuary feast by a man or a woman of his own moiety.

Among the *Caingang* of Palmas, the father decided, when he painted a son or a daughter for the first time, to which of the two

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precipitate it into a boiling pot. He also describes the slippery path from which it may fall into a swamp, where a huge crab awaits it (Nimuendajú, 1914, p. 372).

But at last the soul arrives at an underworld in the west, where it is day during our night, and where the forests teem with tapirs, deer, and other game. The souls of the aged become young again and live for the span of a human life. After a second death, the soul turns into a small insect, generally a mosquito or an ant, whose death ends everything; for this reason the *Caingang* never kill these insects (Baldus, 1937 c, p. 49).

WARFARE

A man who has been offended by some member of the community stands in front of his hut and in a loud voice enumerates all his grievances, sometimes bursting into a chant. He ends with threats against his enemy who, in the meantime, behaves in the same manner on the other side of the camp. After reciprocal abuses that often last a whole night, the challenger, followed by a group of supporters, advances toward the offender, who is immediately assisted by his own partisans. Both factions, armed with wooden clubs, fight a pitched battle, but are careful not to kill anybody. The sham battles of the *Caingang* have been described by many observers and may well be formalized brawls which have been interpreted as sportive games.

Feuds between *Caingang* groups may develop into regular warfare. When one group engages another, the members of the Kadnyerú moity subdivision always form the first line. The Kamé constitute the second line and enter the fight as a reserve to take the place of the exhausted Kadnyerú. Battles between related groups are always preceded by exchanges of insults and by other demonstrations of anger. Although no weapons but cudgels are used, blows are so lustily administered that many are seriously wounded or killed.

Wars against foreign tribes or the Whites were less strictly patternized. The *Caingang*, like all Indians, relied mainly on surprise attacks carried on at dawn. After a general discharge of arrows, the warriors, armed with their clubs, rushed against the enemy (Horta Barbosa, 1913, p. 42).

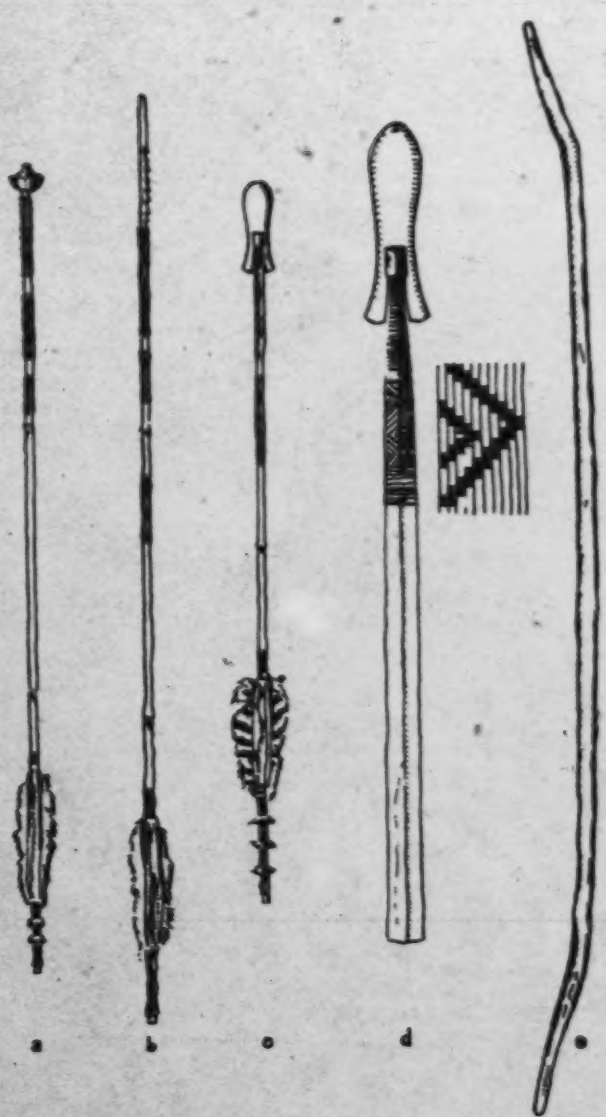
Women and children were generally spared and were adopted by the victorious group. They cut off the heads of slain enemies but did not keep them as trophies.

ETIQUETTE

When a *Caingang* visits another village, he hides in the vicinity until able to announce his presence to some relative. The host receives him with his face covered with a cloth and does not look at his guest until

PLATE III

411



a Bird arrow *b* Small-game arrow *c* Large-game arrow
d Lance *e* Bow

[p. 156(A)]

2: Henry E-5 (1932-1934) 1941
SM3 Caingang SM3
Aweikoma

extremely scarce, and the Indians, instead of spending their time hunting, spend a great part of it tilling the soil.

The data that I offer present problems rather than solve them. They were collected at a particular time of the year: when the most important wild crop of the region, pine nuts, was ripe; when it was still warm and the tapirs ran slowly; when the females were heavy with young; when some wild fruits other than the pine nut were ripe and on the trees; when the bees were still making honey and their young had not yet begun to devour it. In other words, it was the most nearly perfect time of the year in the region where the Kaingáng would find it easiest to get food. Pine trees were abundant, which meant not only food for the Indians but also food for monkeys and all the four-footed animals that might live on the fallen nuts, particularly the peccary. Besides this the region was cut by many streams into which the dogs might drive the tapir so that the hunter could kill it easily. The difference that such a terrain makes in hunting tapir is amazing. Time after time dogs have been taken a little way up the river and turned loose on fresh tapir tracks only to run fruitlessly all day long because the lie of the land was such that the tapir need never drive toward a stream. The flat top of the ridge stretched for miles unintersected by any streams until it ended three hours journey to the northwest in the Deniker River. It was one of my grievances against the Indians that they would take my dogs to such a place against my will and let them run after a tapir until night overtook them, far out of reach of anyone, whereupon the Indians would return, leaving the dogs in the forest. Days later they would wander in, their snouts full of porcupine quills and their hides cut by the teeth of *quatí*.

At the time of my study the Indians had hunted over the same area for almost twenty years. It is vast, and tapir are still to be found there; yet persistent hunting in one area must affect the number of animals, particularly when the favorite season for hunting tapir is the time of the pine nuts, i.e. when the females are heavy with young. Hunting by the settlers, although not very frequent, nevertheless occurs and may affect the quantity of game animals. On the other hand, during the five weeks' hunt the Indians had the use of my dogs—two well-trained tapir hunters—which I managed to keep fairly well fed. Under aboriginal conditions it would be rare for the Indians to have specially trained tapir-hunters, and they would never be well fed. This, of course, reduces the dog's efficiency.

Not all of the adult or adolescent males were armed during the trip, which, of course, reduced the efficiency of the group. Nowadays the young men never learn to shoot with bow and arrow, and if they are too poor to buy a gun they cannot hunt.

2: Henry E-5 (1932-1934) 1941
SM3 Caingang SM3
Aweikoma

whom worked steadily. A heavy central pole nine feet high was sunk in the ground. Then a "ladder," i.e. a pole sloping from the ground to a point about four feet above the ground on the central pole, was tied to it so that the workers could reach the top of the central post. Six poles were sunk in a circle around the central post, about two yards from it, making the maximum diameter of the house approximately four yards.[12] Each pole was bent over toward the central post, caught by a man standing on the "ladder," and bound in place about a foot from the top. Five men worked to maneuver one pole so that it might be bent and bound: two held it in place, a third pushed it into an arc toward the center, and a fourth standing on the ladder pulled it down and in. The two arches first erected were separated widely to leave room for passage. When the arches were in place transverses were bound to them, the first one eight inches above the ground. The ends of the transverses were bound together. This frame was covered with *palha* and palm fronds all the way to the top.

Weapons

Bows

The Kaingáng told me that in order to make a bow a *kakŧóngĝála*[13] tree is cut down and the trunk cut into sections and split with wedges. The desirable piece is then further reduced in cross section with an axe, and pointed at both ends with a knife. Then it is heated in the fire, rubbed with wax, and heated again. A short post with a fork at its upper end is sunk in the ground and braced with a second post. The bow is placed in the crotch, bent, and held in this position by another short post sunk in the ground. When the bow has been in the crotch for some time and thus permanently bent to its proper shape it is taken out and worked to the proper smoothness. This is all done by one person.

Nowadays Kaingáng bows have no howler-monkey tails on them, but at the time of the pacification the Kaingáng used to slip these tails over their bows to strengthen them. Whenever a howler monkey was killed they would cut off its tail, turn it inside out, and slip it over a stick of the same cross section as their bows. When they were dry they would turn them right side out and put them on their bows. One informant told me that the ancients used the tails of lizards. I never saw bows made.

[12] Exactly 3.80 meters.

[13] Known in Brazil as the *cabiúna*, a large tree yielding one of the finest and strongest hard woods of the Brazilian forests. The Kaingáng bow is from six to seven feet long and was often used as a club.

2: Henry E-5 (1932-1934) 1941
SM3 Caingang SM3
Aweikoma

Arrows

Kaingáng arrows have one type of shaft and three types of heads, the iron head for tapir, deer, and howler monkeys, the barbed wooden head for smaller game, and the blunt head with nipple for birds. 411

The arrow shafts are made from bamboo which is cut while green, heated, and straightened and allowed to season. The longest shafts are used for the barbed wooden heads. These heads are whittled from a branch of *kóngún*. They have a sharp point and have two edges, one of which is sharp while the other is provided with five barbs. The heads of these arrows (*lqlq*, thorn) are hardened in the fire. The origin of the use of the *kóngún* for this type of arrow may be magical, for the tree from which they are taken is very thorny. When the heads are completed they are fitted into the shafts and bound in place with cipo, which is wound tight around the shaft at the junction of head and shaft. Then the whole is waxed and rubbed.

The next longest are the *ndó*, the bird arrows. These are whittled from pine knots. In shape the heads resemble inverted cones with nipples at the base.

The iron-headed arrows are the shortest, as is natural because of the great weight of the head, and the most difficult to make. These iron heads may be anywhere from three inches to almost a foot long and in average shape resemble very much the bill of the spoon-billed duck. Instead of being pointed at the tip they are perfectly rounded and are sharpened to razor keenness. They are also sharpened all along both edges. They have no barbs but end in blunt flanges. These arrows are used most generally at short range and make a terrific wound.

Iron arrows are made from metal stolen from the Brazilians, heated in the fire, hammered down with stones to the proper shape, and filed to an edge with a file obtained in the same way as the iron. The arrow head is finished with three flanges at the base, the central one fitted into a deep notch made for it in a short stick. This notch is filled with a strong black wax which gives the head additional support. Then the notch is tightly wound with cipó and the stick is fitted into the shaft which is wrapped with cipó and waxed. [325]

Feathering for all but iron arrows is preferably done with the feathers of the jacutinga. The feathers are not split or wound around the shaft but bound on opposite sides of it. This is possible because only those feathers are used which have tendrils on but one edge. For iron arrows the feathers of the hawk are used. They are looked on as suited for the iron arrows because they come from such a powerful bird.

The making of arrows is done entirely by the owner.

2: Henry E-5 (1932-1934) 1941
SM3 Caingang SM3
Aweikoma

Lances

411 The blade of this astonishing weapon is made from a single piece of iron that is worked by heating for days in the flames, pounding with stones, and then filing to razor sharpness.[14] The blade of the lance illustrated is 15⅛ inches from the tip to the bottom of the central flange, the actual usable length 12½ inches, 3½ inches at the widest point, sweeping gracefully in to a width of 2⅜ inches at the narrowest point. This was the only lance left among the Kaingáng when I came there; so it is impossible to make any general statements about the size of the blade; but I have been told that this is by no means one of the largest. Many, of course, must have been smaller, for the size of the blade depended on the size of the piece of iron obtained.

The peculiar shape of the blade might suggest that the Kaingáng lance was used principally for striking and not for stabbing. From stories it appears that the lance was used more often to strike than to stab, though stabbing was quite frequent. Nevertheless when we realize that the iron arrow heads were exactly the same shape as the lance heads it becomes clear that the shape of the lance blade was not determined by the fact that it was used more for striking than for stabbing. Obviously the drive of an arrow is always head on. The real reason that the lance was used more for striking than for stabbing was because the lance is a development of the club. The handle of the lance is exactly the same shape as a club,[15] except for the fact that the lance tapers toward the notch where the blade is inserted. The lance is grasped in the same way as the club. Kaingáng lance heads have had the same shape stages as the arrows.

Curiously enough, the lances were the weapons least used by the Kaingáng. One would imagine that these lances would be ideal for slaughtering Brazilians, but the Kaingáng always left them at home when they went raiding. They preferred to cut clubs from hard woods just before attacking and to throw them away when they were finished. Sometimes they simply used their bows as clubs, but this involved danger of breakage. The Kaingáng say that they left the lances at home so that the women could use them to kill tapirs while they were gone.

The use of the lance *par excellence* was for murdering vendetta enemies. Most of the massacres were accomplished with lances. The Kaingáng beat time with their lances while they sang at the festas, so that they were fully prepared to turn upon their enemies suddenly and slaughter them.

In general the technique of making the blades is the same as for the iron arrow heads except that more than one man is needed. The heating and

[14] With a file stolen from the Brazilians.

[15] I.e. four-cornered; lozenge shaped in cross-section.

2: Henry E-5 (1932-1934) 1941
SM3 Caingang SM3
Aweikoma

pounding is a long and tedious process, so that the men help one another. 411
The blade is placed directly on the handle and not, as in the case of the arrow head, first on a wooden foreshaft which is fitted into the long bamboo aftershaft. The handle of the lance is ornamented near the upper end with an attractively woven glove of basketry.

Besides a large lance some men had in addition a little one, about one-third as big, which could be hung from the neck by a plaited band. It was useful for killing tapir.

Utensils

Beer Troughs

These are made from cedar trees. The Brazilian cedar is a mighty tree, 415
dwarfing our North American variety to a weed. In order to make a 483
trough a cedar is cut down and a section cut out. It may then be discovered that the log has a split in it, and in that case it becomes necessary to cut down another tree. This may go on for some time until at last a perfect log is secured. Then it must be moved back to camp, and since it is impossible for one man to do this several cooperate. If the log is on a hill the outer bark of the cedar which has been removed from the selected section is placed along the sides of the hill and used as skids. When level ground is reached the log is turned end over end through the "dirty" forest and rolled through the "clean."

When the log has been got into camp someone goes to work on it with 415
an axe. He marks out the mouth, about eight inches wide, and hews away 322
steadily until he can no longer strike accurately into the interior of the trough. Then he takes a gouge, a piece of sharpened iron bound on the end of a six-foot pole, and finishes the hollowing out. If he grows tired someone else takes his place. When the gouging has been completed the trough is stood on end and a fire made in it with dry bamboo to clean it. Then the charcoal is scraped out with an adze.

In order to guard against leakage wax is heated with a hot brand and 415
rubbed over the ends of the trough. The ends themselves are also heated in order to make the wax run. When the trough is finished a shallow pit is dug to accommodate it.

If a trough starts to leak the festa may be hastened in order that the beer may be drunk up before it is all lost, or an attempt to mend it may be made by spreading wax over the outside of the leaking end and mixing it with ashes. When I saw this done once the effects were practically nil; I sent for some pails and pans and the beer was emptied into them. Melted wax was then poured on the inside of the trough and rubbed in with the

X193 X539

(5) *kū ŋv kɔɪŋgɜk tɛ̄ vv'ŋgɔ tɛ̄ ka ɛ*
then man a larva during his

plū tɛ̄ ko 'vaɪ kū tɛ̄
wife coitus never and

So during the time of the *vv'ŋgɔ* men refrain from cohabiting with their wives.

(6) *kū ɔŋ ŋv ŋaɪka'ŋglɔ̃ mu*
then imitate

Then they imitated.

(7) *kū ŋv ɔŋ pay ka'ŋglɔ̃ mu*
then they shoot imitate

Then they experimented shooting.

In the following sentences, containing verbs similar in structure to the text example, we shall also see that when the verb has a direct object *ŋaɪ* disappears:

(1) *ɛŋ ha e tʃɔ̄ ɲɛŋga ku'pe e tʃɔ̄ ŋaɪɲɛ 'pe ŋa*
I I hand wash I wash

I am washing my hands.

(2) *ɛŋ ha e tʃɔ̄ ɛ tɛ̄ to ŋaɪɲɛ'põ ŋa*
I I house order

I ordered the house (to be made).

(3) *a ha mbæŋ dʒɔklā tɛ̄ to ɛŋ ɲɛ'põ ŋa*
you axe handle me order

You ordered me to make a handle for your axe; i. e. I was ordered to make a handle for your axe.

(4) *kū yi ŋv ŋanɛ'ŋglõ tɛ̄*
then it is said a male personal name

ɛ ka'lɜ 'yɜlɜ ɛ tɔ̄ 'tu
his (own) lance cord he carry on the back

kū ŋaɪɲɛ'klæŋ nɛ
and recite the origin myths sit

[H11] Then *ŋanɛ'ŋglõ* was sitting reciting the origin myths with his small lance (a small lance hung around the neck by a fibre strap) hanging down his back.

ko kɔ'ma ko 'klæŋ
eat fear (?) (ant eater) eat recite the

ŋa
origin myths

[773] [262] It is the origin myth about the eating of the ant-eater (a tabu animal).

[p.265 (N)]

302 When important battles are to be waged, the warriors of this tribe have the custom of painting their face and trunk with broad strokes of a special black dye, meant to induce greater terror in their enemies. This is why several members of civilized communities attacked by these Indians maintained that they had "recognized" Negroes among them, alleged criminals who had joined the Indians to escape the law...

301 They also adorn themselves with necklaces, which prior to the time of peaceful contact they made with various seeds, the teeth and claws of animals, hooves of small deer and tapir, etc.
[177] In addition, they made use of all the objects they managed to acquire in the course of their raids, such as harness rings, buckles, strainers, buttons, inner pieces of clocks (which they invariably destroyed), coins, empty or full cartridges, etc. Suffice it to say that these necklaces, which often weigh as much as two or three kilograms, are veritable show cases of whatever has come into their hands.

●411 The Botocudo bow, vôio, is always made of the tough and elastic cabiuna [the black rosewood, Dalbergia nigra--Translator] wood, catangára in the native tongue, which belongs to the same family (Leguminosae) as ipê. The latter was named pau d'arco [bow wood] by the Portuguese because it was used for this purpose by all the coastal tribes (Tupi, Guarani). The arrows are of three kinds: war arrows with metal blades; hunting arrows with tips of hard wood barbed on one side; and the short arrows [virotes] used exclusively to hunt birds, which kill by impact and inflict no open wound.

In addition to these weapons, they own impressive spears with metal blades measuring up to ten or twelve centimeters in width and thirty or forty in length, and shaped like the tip of the war arrows. The consummate skill with which they handle this formidable weapon is nearly incredible. They use it in a sort of fencing struggle by holding it with both hands in the center of the shaft. The tip of the shaft is used to parry and avert blows, and the blade to attack the adversary with lunges which cause instant death if not parried in time. Enemy heads have been severed at one blow. In the course of fencing bouts the Botocudo use downward as well as upward strokes, and leap constantly with great skill, to the front as well as to the rear.

411 Another weapon is the kõuan, a club 1.50 centimeters [sic] in length. Its cylindrical handle extends into a broadening lozenge [prism] with very sharp edges.

These clubs as well as the spears (lõng-lõma, kõlẽdma) are ornamented with burned-in linear figures, and the latter are also adorned where the blade joins the shaft with an attractive strip plaited in two colors.

712 When fearing a possible attack, they fortify the vicinity of their camp with pitfalls which may be as deep as two meters and even more. The walls are covered with sharpened spikes, and in the center [124] they place a spear. Whoever falls into one of these holds invariably dies a horrible death.

They conceal these pits so skilfully, covering them with light sticks and foliage, that without previous knowledge even the Indians fail to discern them.

A lamentable accident occurred at the Post shortly after peaceful contact began. An Indian who had reached the camp at night from another location fell into one of the pits and died a few hours later from the horrible wounds lacerating his body.

In addition to these pits, the camps are always protected with barricades [trincheiras] built in the most propitious spots. When danger threatens, these barriers are manned day and night by experienced warriors.

198 They possess an efficient whistle language made up of various bird calls, through which they communicate remarkably well by exchanging signals and warnings when they keep watch around the camps, at night or in the daytime, whenever the need arises.

372 They make fire in the usual manner of Brazilian tribes--by rubbing two sticks, one of them hard wood and the other softer.

They proceed by steadying with their toes a piece of soft wood with a notch in the center, where they rest the tip of a rod made of very hard wood.

The rotating motion imparted to this stick with the palm of the hands produces a very fine dust which eventually catches fire. When a tenuous spiral of blue smoke begins to wind around the stick, the rotation is further accelerated and the dust begins to burn. Then minute fragments of dry grated wood are carefully piled together, and repeated blowing produces a small flame which is gradually enlarged.